

PATENT
Attorney Docket No. P03357US2

31011 U.S. PTO
10/022127
10/30/01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent application of: Rekha G. Panchal and Charles J. Link, Jr.
For: HUMAN SUPPRESSOR tRNA OLIGONUCLEOTIDES AND METHODS OF USE FOR
SAME,

the specification of which is being transmitted herewith.

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

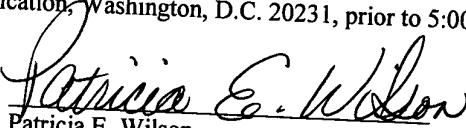
Attached are Forms PTO/SB/08A and 08B (formerly Form PTO-1449) listing the relevant art known to the applicant herein. The Examiner is requested to consider the references and make them of record. This application relies, under 35 U.S.C. § 120, on the earlier filing date of prior application Serial No. 09/229,212, filed on January 13, 1999. Each of the references listed on Forms PTO/SB08A and 08B were submitted to, and/or cited by, the Patent Office in the prior application(s) and, therefore, are not required to be provided in this application.

Applicants submit herewith patents, publications or other information, of which they are aware that they believe may be material to the examination of this application, and in respect of which, there may be a duty to disclose.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 C.F.R. § 1.97(g)), an admission that the

CERTIFICATE OF MAILING BY EXPRESS MAIL

I hereby certify that this document and the documents referred to as enclosed therein are being deposited with the U.S. Postal Service in an envelope as "Express Mail Post Office to Addressee" addressed to: Assistant Commissioner for Patents, Box Patent Application, Washington, D.C. 20231, prior to 5:00 p.m. on the 30th day of October, 2001.

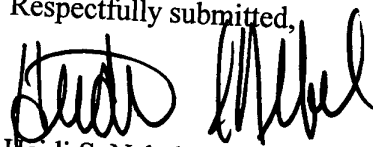

Patricia E. Wilson

Express Mail Label # EL911005635US

information cited is, or is considered to be, material to patentability, or that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner. (Notice of January 9, 1992, 1135 O.G. 13-25, at 25.)

Respectfully submitted,



Heidi S. Nebel, Reg. No. 37,719
ZARLEY, McKEE, THOMTE, VOORHEES
& SEASE

801 Grand Avenue, Suite 3200
Des Moines, Iowa 50309-2721
Phone No. (515) 288-3667
Fax No. (515) 288-1338
CUSTOMER NO: 22885

- pw -

Attorneys of Record

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	1	of	2
-------	---	----	---

Complete if Known

Application Number

Filing Date

October 30, 2001

First Named Inventor

PANCHAL, Rekha G.

Group Art Unit

1635

Examiner Name

J. Epps

Attorney Docket Number

P03357US2

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

11011 U.S. PTB
10/02/27



10/30/01

OTHER DOCUMENTS (Including Author, Title, Date**, Relevant Pages, Place of Publication***)
Form PTO/SB/08B (08-00)
U.S. Patent and Trademark Office

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Application Number	
		Filing Date	
		First Named Inventor	Panchal, Rekha G.
		Group Art Unit	1635
		Examiner Name	J. Epps
		Attorney Docket Number	P03357US2
Sheet	2	of	2

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Atkinson J, et al., "Mutations to nonsense codons in human genetic disease: implications for gene therapy by nonsense suppressor tRNAs", <i>Nucleic Acids Research</i> , 22(8) 1327-1334 (1994) Oxford GB	
		Atkinson, et al., "Mutations to nonsense codons in human genetic disease: implications for gene therapy by nonsense suppressor tRNAs", <i>Nucleic Acids Research</i> , 22(8) 1327-1334 (1994)	
		Campone JP, "Modulation of the phenotypic expression of a human serine tRNA gene by 5'-flanking sequences", <i>DNA</i> 7(7) 459-468 (1988)	
		Capone JP et al., "Amber, ochre and opal suppressor tRNA genes derived from a human serine tRNA gene", <i>EMBO Journal</i> , 4(1) 213-221 (1985), Eynsham, Oxford GB	
		Li et al., "Ochre Suppressor Transfer RNA restored dystrophin expression in MDX mice", <i>Life Sciences</i> 61(15):205-209	
		Noren, et al., "A general method for site-specific incorporation of unnatural amino acids into proteins", <i>Science</i> , 244 182-188 (1989)	
		O'Neill VA et al., "A human opal suppressor tRNA gene and pseudogene", <i>Journal of Biological Chemistry</i> , 260(4) 2501-2508 (1985)	
		Robinson, et al., "Suppression of single and double nonsense mutations introduced into the diphtheria toxin A-chain gene: a potential binary system for toxin gene therapy", <i>Human Gene Therapy</i> , 6:137-143 (1995)	
		Sprinzi, et al., "Compilation of tRNA sequences", <i>Nucleic Acids Research</i> , 12 suppl., r1-r57 (IRL Press Limited, Oxford, England)	
		Temple GF, et al., "Construction of a functional human suppressor tRNA gene: an approach to gene therapy for β -thalassaemia", <i>Nature</i> , 296(5857) 537-540 (1982)	
		Temple, et al., "Construction of a functional human suppressor tRNA gene: an approach to gene therapy for β -thalassaemia", <i>Nature</i> , 337-340 (1982)	
		Zhang, et al., "Ochre suppressor transfer RNA restorer dystrophin expression in mdx mice", <i>Life Sciences</i> , 61(15):205-209 (1998)	
Examiner Signature	Date Considered		

*EXAMINER: Initial if reference considered whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.